

## **Chapter 7: Costs**

### **Background**

The United States spends approximately 1% of its total Gross Domestic Product for the treatment of mental illness.(McGuire 1991) In 1990, the direct treatment costs for depression in the United States were \$12 billion, with \$1-2.9 billion spent on mental health specialists(Greenberg et al. 1993). However, the direct costs of mental health care account for only a fraction of the difference in healthcare expenditures between depressed and nondepressed patients (Simon, VonKorff and Barlow,1995).

Depressed patients have almost double the medical expenditures of nondepressed patients, even after adjusting for comorbidity (Simon, VonKorff, and Barlow 1995). Depression is associated with longer hospital stays and higher costs,(Levenson, Hamer, and Rossiter 1990) and depressed patients have nearly three times the outpatient pharmacy costs compared to patients not taking antidepressants (Simon, VonKorff, and Barlow 1995). However, antidepressant drugs account for less than half of these cost differences.

Increases in non-mental health specialty utilization is particularly important among depressed elderly patients, who have higher rates of medical illness and who are less likely than younger patients to see a mental health specialist (Unutzer et al. 1997) (Blazer, 1996).

To provide the broadest range of information, we report on total costs for depressed patients in FY02, the relative costs of psychiatric and medical care, and the relative costs of inpatient and outpatient care.

The Allocation Resource Center (ARC) in Braintree, Massachusetts provided the cost data for each patient by facility and cost center. Please see Appendix D for detailed information about ARC cost data.

### **Findings**

Approximately \$3.0 billion was spent in FY02 for medical and psychiatric care for depressed patients. The mean expenditure per patient was \$12,200.

Twenty-seven percent of all healthcare costs were for psychiatric care; 92% of costs were for outpatient services and 8% for inpatient services.

When mean patient costs were compared across cost centers, the top cost center was psychiatry (\$985), followed by medical (\$912) and surgical (\$513). For a more detailed description of services included in each cost center, please see Appendix D.

**Table 7.A: Costs, by Diagnosis Grouping**

		FY02 Patients with Depression				All
		Dep alone or w/OthAnx	Dep + SAbuse	Dep + PTSD	complicated Dep	
		N=158,768	N=67,890	N=57,720	N=20,744	N=305,122
Total DSS cost (in thousands \$)		\$1,124,978	\$997,607	\$528,760	\$252,622	\$2,903,967
	%	39%	34%	18%	9%	100%
Psych vs. Non-Psych costs						
Psychiatric costs	%	20.9%	40.3%	28.5%	24.9%	27.0%
Non-psychiatric costs	%	79.1%	59.7%	71.5%	75.1%	73.1%
Total	%	100	100	100	100	100
Hospital costs, (pts with hospital use)						
Per patient	Mean	\$12,719	\$11,646	\$11,020	\$15,417	\$12,200
Per day of stay	Mean	\$1,452	\$920	\$1,280	\$1,064	\$1,153
Outpatient (OP) costs, pts with OP use						
Per patient	Mean	\$5,064	\$7,400	\$6,923	\$7,084	\$6,073
Per visit day	Mean	\$327	\$272	\$306	\$329	\$311
Patient costs by cost center, all pts						
Medical	Mean	\$815	\$1,221	\$665	\$1,328	\$912
Surgical	Mean	\$501	\$581	\$470	\$505	\$513
Psychiatric	Mean	\$224	\$2,893	\$553	\$1,773	\$985

Number  
of patients

Visn1	Visn2	Visn3	Visn4	Visn5	Visn6	Visn7	Visn8	Visn9	Visn10	Visn11	Visn12	Visn15	Visn16	Visn17	Visn18	Visn19	Visn20	Visn21	Visn22	Vis23
15,261	8,357	11,389	13,786	7,424	13,955	17,387	28,388	14,096	12,800	12,166	11,393	14,167	27,988	13,648	13,329	8,791	15,508	13,814	17,217	14,258

Section 7. Cost by VISN

ALL COSTS ARE IN THOUSANDS OF DOLLARS

	Total FY02 DSS Costs,																Overall = \$2,903,967						
	Visn1	Visn2	Visn3	Visn4	Visn5	Visn6	Visn7	Visn8	Visn9	Visn10	Visn11	Visn12	Visn15	Visn16	Visn17	Visn18	Visn19	Visn20	Visn21	Visn22	Visn23		
	160,735	82,924	137,924	126,399	89,468	117,322	147,749	229,919	122,759	120,206	104,301	135,276	120,169	231,264	128,479	110,264	85,337	161,128	155,626	184,662	152,055		
	Psychiatric costs, %																Overall % = 27%						
	34.9%	28.7%	27.5%	26.8%	30.1%	25.9%	25.7%	20.7%	21%	29.9%	27%	27.5%	21.8%	25%	25.4%	27.2%	28.2%	32.8%	31.1%	29%	30%		
	Hospital Costs per Patient (Mean for patients with Hospital Use)																Overall Mean = \$12,200						
	\$13,334	\$12,828	\$17,585	\$13,495	\$12,546	\$10,859	\$11,523	\$10,261	\$10,928	\$10,550	\$11,949	\$13,800	\$10,578	\$12,294	\$11,069	\$10,626	\$13,345	\$11,624	\$14,898	\$14,571	\$12,303		
	Hospital Costs per Day of Stay (Mean for patients with hospital use)																Overall Mean = \$1,153						
	\$996	\$1,189	\$1,218	\$1,228	\$977	\$1,011	\$1,222	\$970	\$1,107	\$993	\$1,160	\$1,176	\$959	\$1,174	\$941	\$1,247	\$1,409	\$1,222	\$1,461	\$1,430	\$1,411		
	Outpatient Costs per Patient (Mean for patients with outpatient use)																Overall Mean = \$6,073						
	\$6,935	\$6,366	\$7,195	\$5,510	\$6,511	\$5,304	\$5,750	\$5,556	\$5,407	\$5,853	\$5,415	\$6,664	\$5,204	\$5,390	\$5,782	\$5,455	\$6,450	\$6,679	\$7,397	\$7,383	\$6,820		
	Outpatient Costs per Visit Day (Mean for patients with outpatient use)																Overall Mean = \$311						
	\$309	\$276	\$321	\$320	\$269	\$315	\$315	\$282	\$336	\$270	\$330	\$288	\$311	\$323	\$296	\$278	\$321	\$338	\$323	\$327	\$359		
	Medical Costs (Mean for all patients)																Overall Mean = \$912						
	\$639	\$871	\$1,252	\$804	\$1,079	\$849	\$886	\$927	\$1,085	\$711	\$897	\$1,407	\$955	\$875	\$800	\$972	\$913	\$870	\$727	\$887	\$1,003		
	Surgical Costs (Mean for all patients)																Overall Mean = \$513						
	\$488	\$457	\$582	\$556	\$559	\$405	\$467	\$387	\$544	\$405	\$456	\$606	\$390	\$486	\$541	\$509	\$558	\$633	\$688	\$575	\$656		
	Psychiatric Costs (Mean for all patients)																Overall Mean = \$985						
	\$1,511	\$842	\$1,218	\$998	\$1,885	\$1,175	\$899	\$464	\$933	\$904	\$977	\$1,404	\$995	\$953	\$939	\$655	\$1,250	\$944	\$1,110	\$961	\$788		